

IN THE CLAIM:

1 - 8 (Canceled)

9. (Currently Amended) A Coriolis mass flow meter comprising:

two parallel flow tubes of a curved tube type having base plates fixedly fitted to them
at points serving as vibration fulcrums;

5 a drive unit disposed at the central part of said flow tubes for causing any one of said
flow tubes to resonate with the other tube in a phase opposite to each other;

a pair of vibration sensors disposed at symmetrical positions with respect to the
mounting position of said drive unit for sensing a phase difference proportional to Coriolis
force; said drive unit and a pair of said vibration sensors each being formed by a coil and a
magnet; said drive unit coil is fitted to any one of said flow tubes and said drive unit magnet is
10 fitted to the other of said flow tubes, and magnets of said vibration sensors are fitted to said any
one of said flow tubes and coils of said vibration sensors are fitted to said other flow tube,
wherein a support post facing at the end thereof said drive unit provided at the central part of
said flow tubes and having wires for electrical connection passed therein is provided; a first
flexible printed circuit board extending from the end surface of said support post to the one
15 flow tube is connected to said drive unit coil, and a second flexible printed circuit board
extending from the end surface of said support post to the other flow tube is connected to wires
extended from coils of said vibration sensors along the surface of said flow tubes in such a
manner that said flexible printed circuit boards are bent at the central part of said flow tubes

almost symmetrically with respect to the vibration center of each flow tube.

10. (Canceled)

11. (Currently Amended) A Coriolis mass flow meter comprising:

an inlet manifold having an inlet side with a single port, said inlet manifold having an outlet side with first and second ports;

5 a first flow tube having an upstream end connected to said first port of said inlet manifold;

a second flow tube having an upstream end connected to said second port of said inlet manifold;

10 an outlet manifold having an inlet side with a first and second ports, said first port of said outlet manifold being connected to a downstream end of said first flow tube, said second port of said outlet manifold being connected to a downstream end of said second flow tube, said outlet manifold having an outlet side with a single port, said outlet manifold being a separate structure from said inlet manifold;

a drive unit vibratable of said first and second flow tubes in opposite phase to each other;

15 a pair of vibration sensors for sensing a phase difference between said first and second flow tubes caused by a Coriolis force from fluid flowing through said first and second flow tubes;

base plates connected to said first and second flow tubes and forming first vibration fulcrums, a connection between said first and second ports of said inlet manifold and a
20 connection between said first and second ports of said outlet manifold forming second vibration fulcrums;

a meter body connected to said inlet side of said inlet manifold and connected to said outlet side of said outlet manifold, said meter body being spaced from said second vibration fulcrums, said meter body being connected to said manifolds to transmit external vibrations
25 between said inlet side of said inlet manifold and said outlet side of said outlet manifold,
wherein:

said drive unit includes a magnet connected to said first flow tube and includes a coil connected to said second flow tube;

each of said sensors include a magnet connected to said second flow tube and include
30 a coil connected to said first flow tube

said first and second flow tubes have a U shape;

a support post is arranged on said meter body and extends along a center of said U
shape;

said drive unit is arranged in a center of said U shape;

35 a first flexible circuit board extends from said support post to said first flow tube; and
a second flexible circuit board extends from said support post to said second flow tube.
said first and second flexible circuit boards curve substantially symmetrically.

12. (Previously Presented) A meter in accordance with claim 11, wherein:
said drive unit vibrates said first and second flow tubes toward and away from each other.

13. (Previously Presented) A meter in accordance with claim 11, wherein:
said meter body is spaced from said first and second ports of said inlet and outlet manifold

14. (Previously Presented) A meter in accordance with claim 11, wherein:
said first and second ports of said inlet manifold are spaced from each other;
said first and second ports of said outlet manifold are spaced from each other.

15 - 16 (Canceled)

17. (Previously Presented) A meter in accordance with claim 11, wherein:
said vibration sensors are arranged at secondary vibration nodes of said first and second flow tubes.

18. (Previously Presented) A meter in accordance with claim 11, wherein:
said inlet and outlet manifolds have a shape to preclude the manifolds from having a particular natural frequency.

19. (Previously Presented) A meter in accordance with claim 11, wherein:
said inlet and outlet manifolds have a continuously increasing shape without a particular
natural frequency.